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LISTING OF THE CLAIMS

1. (Previously Presented) A method for constructing a gel-forming battery separator comprising:
 - providing a porous support;
 - embedding particles into pores of the porous support by applying the particles to a side of the porous support and applying a vacuum to an opposite side of the porous support, thereby forming a composite, the particles having surfaces comprising a silanol group; and
 - contacting the composite with an effective amount of liquid electrolyte; contact with the liquid electrolyte being capable of forming a gelled matrix comprising electrolyte within the porous support.
2. (Previously Presented) The method according to claim 1, wherein the particles are fumed silica particles.
3. (Previously Presented) The method according to claim 1, wherein the liquid electrolyte comprises sulfuric acid.
- 4-7. Cancelled
8. (Previously Presented) A gel-forming battery separator constructed according to claim 1.
9. (Previously Presented) A gel-forming battery separator constructed according to claim 2.
- 10-18. Cancelled
19. (Previously Presented) A method of forming a battery comprising:
 - providing a container and at least one pair of electrodes;
 - placing gel-forming battery separators between each of the at least one pair of electrodes, each separator comprising: a porous support having particles embedded therein, the particles having surfaces comprising a silanol group;

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adding liquid electrolyte to the container, the liquid electrolyte having a specific gravity below a predetermined value required to form a gelled matrix when in contact with the separators; and

charging the electrodes to form the battery, the charging causing an increase in the specific gravity to the value required to form the gelled matrix.

20-32. Cancelled

33. (Previously Presented) A method according to claim 19, the particles being fumed silica, the liquid electrolyte being sulfuric acid, wherein, the value required to form the gelled matrix is about 1.28.

34-35. Cancelled

36. (Previously Presented) The method according to claim 19, wherein the particles are fumed silica particles.

37. (Previously Presented) The method according to claim 19, wherein the liquid electrolyte comprises sulfuric acid.

38. (Previously Presented) A battery constructed according to claim 19.

39. (Previously Presented) A battery constructed according to claim 37.